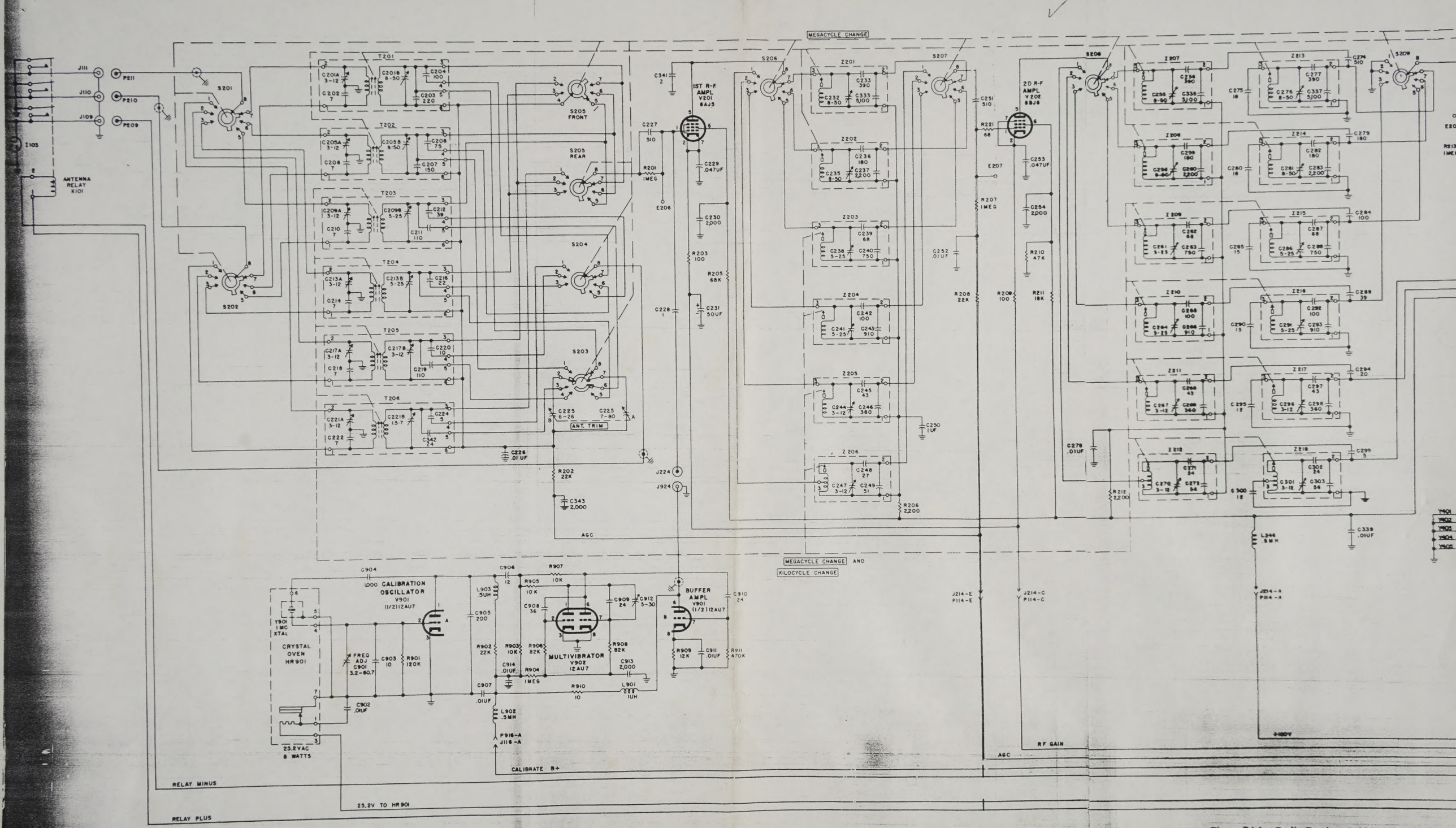


Figure 74 1. Radio Receiver R-390/URR, main schematic diagram (part 1 of 2).

o Receiver R-390/URR, main
'iagram (part 1 of 2).

I-F CATHODE FOLLOWER V511 (1/2)12AU7

R123 56K · R124 500K · C102 .22UF · C537 .1UF · R549 390 · J512 · P112 · J106 IF OUTPUT 50 OHM · C538 .1UF · R550 68

AGC S104: FAST · MED · SLOW

J517-13 P117-13 · C547 1UF · C546 1UF · AGC TIME CONSTANT TUBE V511 (1/2)12AU7 · P117-15 J517-15

GC RECTIFIER V510 (1/2)12AU7 · R556 180K · R555 100K · R557 220K · R559 27 · R560 56K · C544 .1UF · R558 1.2MEG · C545 .1UF

+180V · T601 · TB101 · P119-6 J619-6 · R610 1MEG · C605 .01UF · R613 56K · R612 1200 · L601 4H · P120-6 J620-6 · BREAK-IN RELAY K602 · J619-15 P119-15

SQUELCH V601 (1/2)12AU7 · SQUELCH RELAY K601 · J620-8 P120-8 · J620-4 P120-4

FL601 800 CPS BAND PASS FILTER 600Z · FL602 3500 CPS LOW PASS FILTER 600Z · J619-7 P119-7 · J619-5 P119-5 · J619-4 P119-4 · J619-2 P119-2 · R108 182 · R107 918 · R106 182

LOCAL A-F AMPL V602 (1/2)12AT7 · J619-1 P119-1 · R104 2,500 LOCAL GAIN · C603 .01UF · R606 470K · R607 470K · R604 680 · R605 180K

LOCAL A-F OUTPUT V603 6AK6 · C612 8UF · R608 470 · C604 2,200 · T602 · J619-11 P119-11 · J619-13 P119-13 · 600Z TERM. 3 TO TERM. 6

R127 6,800 · R128 820 · TB102 · PHONES J103 · BREAK IN S106 · TB101

LINE METER S101 · OFF · +10 · Q · -10 · R101 3,600 · R113 200 · R112 200 · R114 250 · R117 2,030 · R122 3,190 · R119 2,030 · R102 3,900 · R120 3,190 · R121 788 · R118 2,740 · R116 200 · R115 200

REMOTE CONTROL J105

J620-7 P120-7 · C103 10UF · C610 .01UF · R630 330K · R631 470K · R628 680 · R629 82K · R634 2,200 · C609 1UF

LINE A-F AMPL V602 (1/2)12AT7 · J619-3 P119-3 · R103 2,500 LINE GAIN · R105 1200 · R111 182 · R110 918 · R109 182

LINE A-F OUTPUT V604 6AK6 · R632 470 · R633 22 · C611 2,200 · T603 · J619-12 P119-12 · J619-10 P119-10 · J619-9 P119-9 · J619-8 P119-8 · 600Z TERM. 3 TO TERM. 6 · TB101

LINE LEVEL M101 · VU

FUNCTION S107 REAR: CAL · SQUELCH · MPX · AGC · STAND BY · OFF · J620-1 P120-1 · J620-2 P120-2

FUNCTION S107 FRONT

AUDIO RESPONSE S102: SHARP · MED. · WIDE

TB 102: RF GAIN · AGC NOR DIV · LOCAL AUDIO · PHNS

TB 101: BRK IN · LINE AUDIO · DIODE LOAD · GND

J214 J413 P916 P715 · J116 J115 P114 P113 · J620 · P120 · J619, J818 · P119, P118 · J517 · P117

NOTES:

1. UNLESS OTHERWISE SHOWN, RESISTORS ARE IN OHMS, CAPACITORS ARE IN UUF, INDUCTORS ARE IN UH.
2. ALL SWITCHES, EXCEPT S201 THRU S210 ARE SHOWN IN THEIR OFF OR FULL COUNTERCLOCKWISE POSITION, AS VIEWED FROM THE FRONT PANEL. SWITCHES S201 THRU S210 OPERATE IN A REVERSE DIRECTION TO THAT OF ALL OTHER SWITCHES. ALL SWITCHES ARE SHOWN ON THIS DIAGRAM, AS VIEWED FROM THE END OPPOSITE THE KNOB OR DRIVEN END.
3. R561 SELECTED AT TEST-RANGE OF VALUES 560 TO 5,600 OHMS.
4. R635 IS NOT INCLUDED IN A-F SUBCHASSIS BELOW MOD 1.
5. ALL RELAY AND OVEN SWITCH CONTACTS ARE SHOWN IN THEIR NORMAL POSITIONS WITH POWER "OFF"
6. VFO SUBCHASSIS SHOWN FOR MOD 1

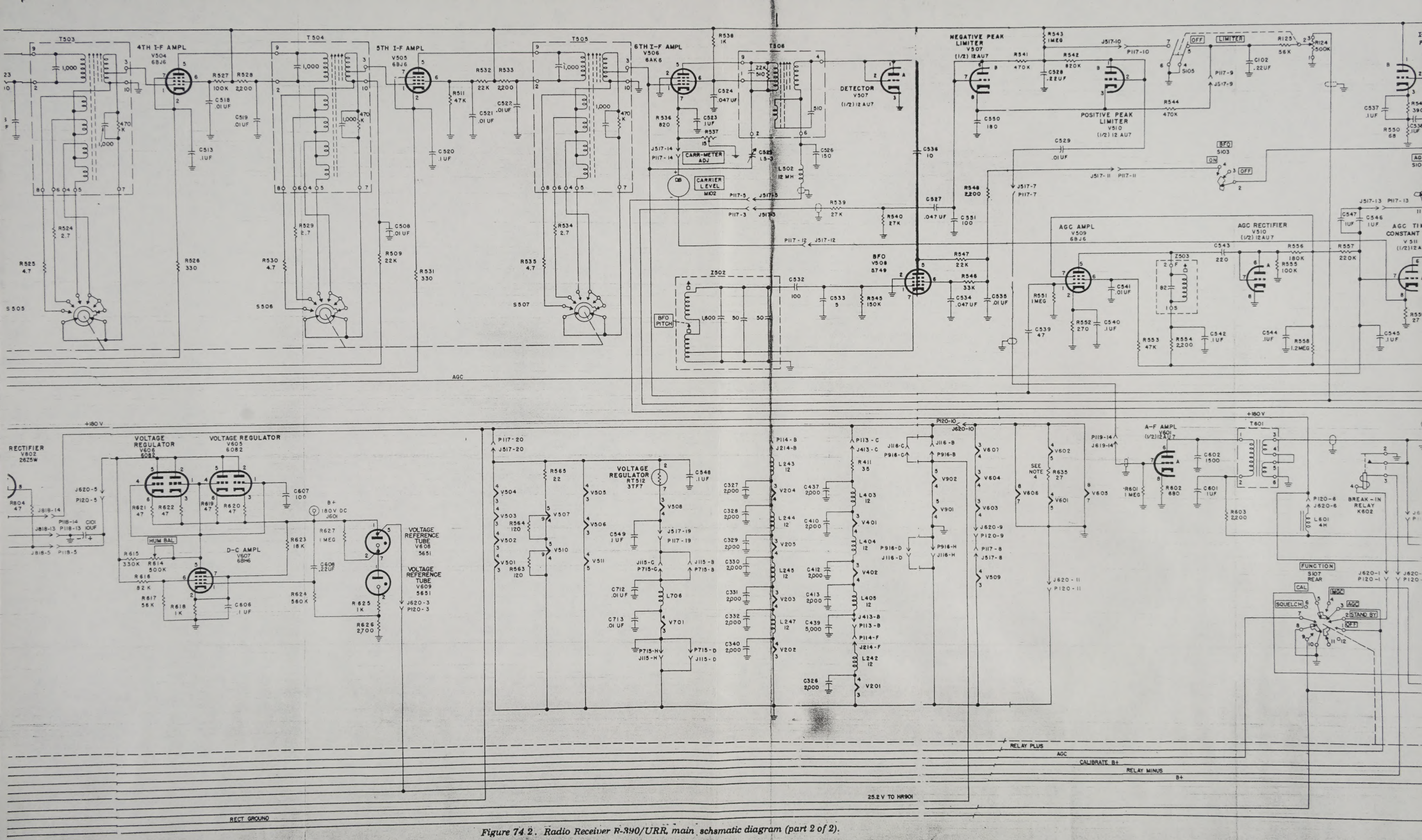


Figure 74.2. Radio Receiver R-390/URR, main schsmatic diagram (part 2 of 2).

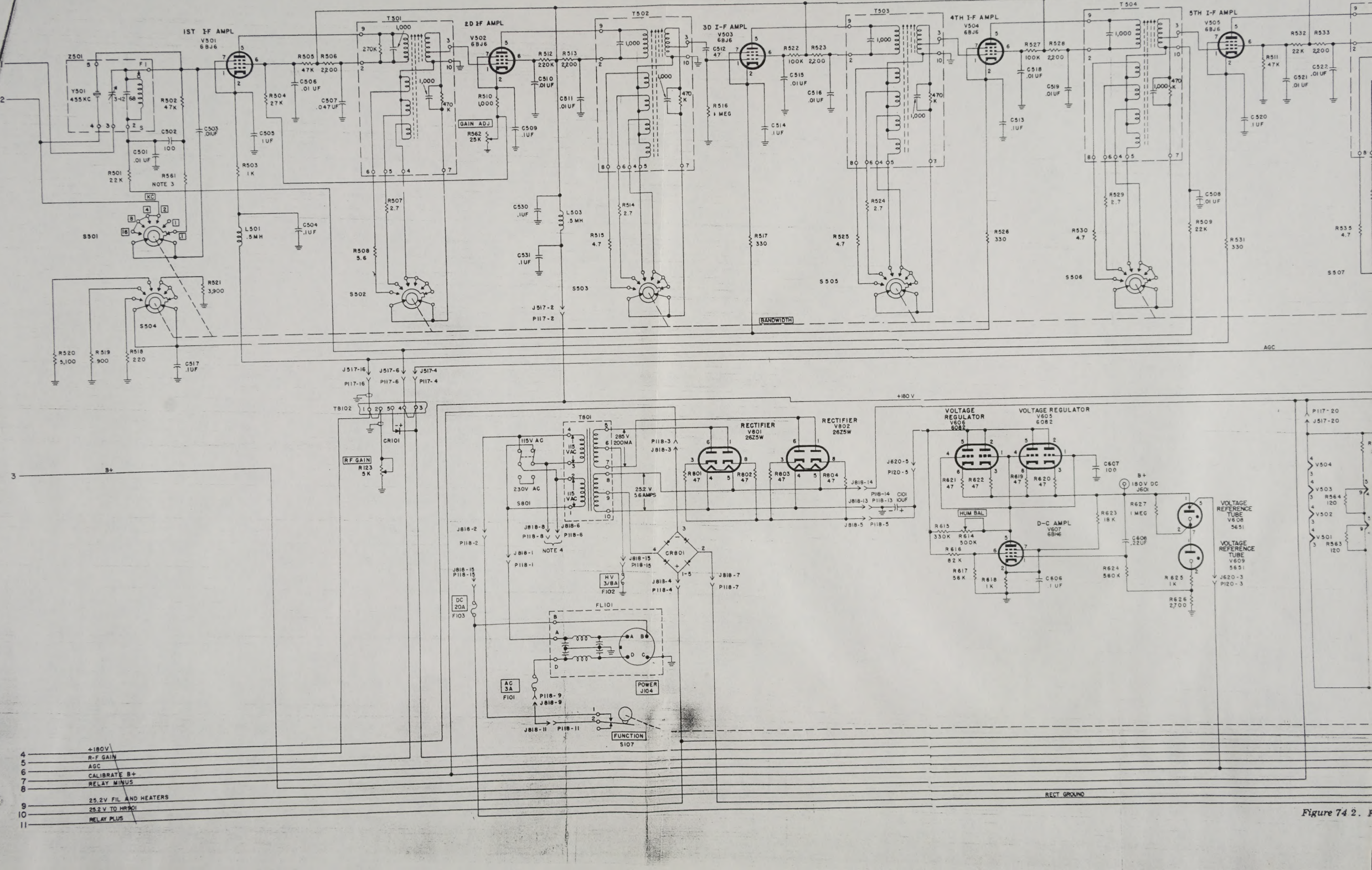
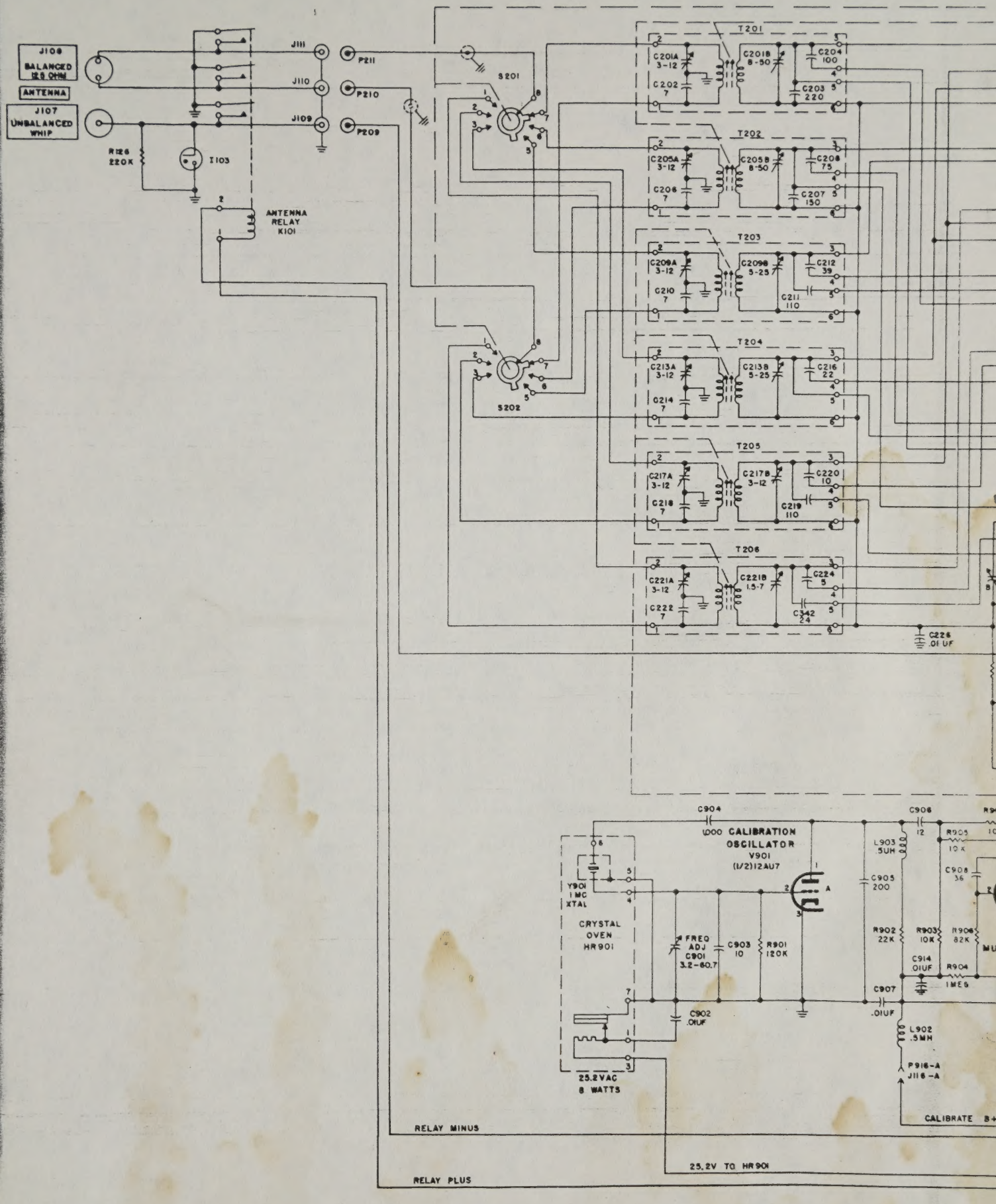

1ST I-F AMPL
V501 6BJ6
2D I-F AMPL
V502 6BJ6
3D I-F AMPL
V503 6BJ6
4TH I-F AMPL
V504 6BJ6
5TH I-F AMPL
V505 6BJ6
T301
T502
T503
T504
Z501
Y501 455KC
F1
S501
S502
S503
S504
S505
S506
S507
GAIN ADJ
R562 25K
NOTE 3
NOTE 4
BANDWIDTH
AGC
J517-16
P117-16
J517-6
P117-6
J517-4
P117-4
TB102
CR101
RF GAIN R123 5K
B+
T801
115V AC
230V AC
S801
285 V 200MA
252 V 5.6 AMPS
RECTIFIER V801 26Z5W
RECTIFIER V802 26Z5W
CR801
HV 3/8A F102
DC 20A F103
AC 3A F101
FL101
POWER J104
FUNCTION S107
VOLTAGE REGULATOR V606 6082
VOLTAGE REGULATOR V605 6082
HUM BAL
D-C AMPL V607 6SN6
VOLTAGE REFERENCE TUBE V608 5651
VOLTAGE REFERENCE TUBE V609 5651
+180 V
180V DC J601
RECT GROUND
+180V
R-F GAIN
AGC
CALIBRATE B+
RELAY MINUS
25.2V FIL AND HEATERS
25.2 V TO HR501
RELAY PLUS

Figure 74 2. F


J108
BALANCED 125 OHM
ANTENNA
J107
UNBALANCED WHIP
J111
J110
J109
P211
P210
P209
S201
S202
R126
220K
I103
ANTENNA RELAY K101
T201
C201A 3-12
C202 7
C201B 8-50
C204 100
C203 220
T202
C205A 3-12
C206 7
C205B 8-50
C208 75
C207 150
T203
C209A 3-12
C210 7
C209B 5-25
C212 39
C211 110
T204
C213A 3-12
C214 7
C213B 5-25
C216 22
T205
C217A 3-12
C218 7
C217B 3-12
C220 10
C219 110
T206
C221A 3-12
C222 7
C221B 1.5-7
C224 5
C342 24
C226 .01 UF
C904
1000 CALIBRATION OSCILLATOR
V901
(1/2)12AU7
Y901 1 MC XTAL
CRYSTAL OVEN HR901
FREQ ADJ C901 3.2-60.7
C903 10
R901 120K
C902 .01UF
25.2VAC 8 WATTS
C906
L903 .5UH
C905 200
R902 22K
R903 10K
R906 82K
C914 .01UF
R904
1 MEG
C907 .01UF
L902 .5MH
P916-A
J116-A
CALIBRATE
RELAY MINUS
25.2V TO HR901
RELAY PLUS